

Scheme for Certification of Design (Building Structures)



Guidance Note 1 Background to the Scheme

The Scottish system of Building Control evolved from the Dean of Guild courts established within urban centres in the 16th and 17th centuries. The Burgh Police (Scotland) Act of 1892, spurred perhaps by the gathering pace of Victorian urban development, was a milestone setting national standards for building construction for the first time through Parliament. In 1954 the Secretary of State for Scotland appointed a committee under the chairmanship of C W Graham Guest QC to review the existing law for the control of building standards; to recommend changes necessary to secure a system which would operate uniformly across Scotland and to take account of developments in new building techniques and materials. The Building (Scotland) Act 1959 was enacted incorporating most of the recommendations of the Guest Committee. With minor amendments over the years, this Act remained the basis for control of building standards in Scotland until the Building (Scotland) Act 2003 came into force.

The 1959 Act left the administration of the system at a local level. Each of the 32 Scottish local authorities, set up in 1995, established a team of specialist building control staff, reporting to elected member committees, to administer the building standards function on behalf of the authority. Submission of plans and supporting documentation to the local authority was required and a building warrant had to be obtained before construction could legally proceed on a building project.

The Building (Scotland) Regulations were updated on several occasions after their introduction in 1959, the most recent version being the 1990 regulations. Technical Standards supporting these Regulations were amended on six occasions since 1990. Regulations covering the self-certification of structural design of buildings were introduced in 1992 permitting a major departure from the procedure that local authorities should check designs prior to the issue of a building warrant. Any Chartered Civil or Structural Engineer could sign a certificate stating that either they had personally designed the structure to which it related or supervised the preparation of the design.

The Building (Scotland) Act 2003 - the Act - was introduced by the Scottish Parliament with the aim of modernising the building standards system in Scotland.

The Act is implemented through the Building (Scotland) Regulations 2004, which include the Building Standards, the Building (Procedures) (Scotland) Regulations 2004, and the Building (Fees) (Scotland) Regulations 2004.

The Technical Handbooks that accompany these Building Regulations offer guidance on the interpretation of the mandatory functional standards. The Procedural Handbook offers

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guidance on the Act and the Procedure Regulations and is supplemented by the Certification Handbook.

All legislation and guidance is available on-line at www.sbsa.gov.uk . Hard copies of the legislation and Technical Handbooks may be obtained from the Stationery Office (the Technical Handbooks are also available from Blackwells and other major booksellers). Copies of the procedural and certification handbooks are available from the SBSA.

The Act introduced the concept of Verifiers who are appointed by Scottish Ministers to oversee the administration of the building warrant process, amongst other duties. For the foreseeable future, the only Verifiers will be the 32 local authorities, except in the case of Crown development.

The self-certification Regulations of 1992 were a weakness of the old system and were in need of replacement. These Regulations placed no obligation on the person signing the certificate to have any experience of the structural design of buildings, the sole criterion being membership of the Institution of Structural Engineers (IStructE) or the Institution of Civil Engineers (ICE). While it might be argued that it is unlikely that a responsible engineer with no knowledge of structural design of buildings would sign such a certificate, the risk existed that an engineer, who had not recognised the limits of their experience, might sign a certificate for work beyond their competence or even without a thorough check of the design being made.

The basic principle of self-certification itself raises serious safety concerns. Self-certification has a place but it must be within the context of a rational assessment of risk. Fresh weight has been given to these arguments by the Standing Committee on Structural Safety (SCOSS). Amongst the conclusions contained in the Thirteenth SCOSS Report (available from www.scoss.org.uk) are:

- 1) The possibility that individuals or organisations might not be competent, or their competence may be affected by commercial or other pressures is a risk to structural safety and needs to be controlled.
- 2) Self-certification where failure would not have high consequences can give adequate assurance of structural safety provided that appropriate systems are in place for ensuring competence.
- 3) Third party independent certification is needed for safety critical aspects of design.
- 4) For structures whose failure has a high consequence or are innovative or unfamiliar to the project team, an explicit process of risk management should be used.

The certification system is grounded on the principle that suitably qualified and experienced building professionals can accept responsibility for ensuring compliance with the building regulations, without the need for detailed scrutiny of designs or inspections by local authorities, provided they are employed by reputable firms that operate a system of careful checking.

A valid Certificate of Design (Building Structures) must be accepted by the Verifier as conclusive of compliance with the building regulations in respect of Standards 1.1 and 1.2.

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The verifier is obliged by the Act to limit the process of verification to that of ensuring that the certificate is signed by persons who are appropriately registered at the date of signature, by checking the on-line SBSA Certification Register (available at www.sbsa.gov.uk). For certified work, the Verifier will not undertake a design appraisal or make any assessment of design adequacy. (See Certification Handbook: section 5. Potential problems)

Certification may only be undertaken by persons approved under Section 7(1) of the Act or by members of schemes approved under Section 7(2) of the Act. Section 7(2) states:

‘The Scottish Ministers may approve schemes in accordance with which persons (whether individuals or bodies corporate or unincorporate) who are for the time being members of the schemes are entitled to exercise for the purposes of this Act the functions of (either or both) - (a) an approved certifier of design, (b) an approved certifier of construction.’

The Scheme for Certification of Design (Building Structures) was approved under Section 7(2) by the Scottish Ministers on 4 November 2004.

The procedure regulations make provision for organisations to provide schemes, termed ‘scheme providers’. For an organisation to gain acceptance as a scheme provider, application must be made to the SBSA. Applicants are required to demonstrate that they possess the expertise and capacity to administer a certification scheme.

The Institution of Structural Engineers (IStructE) acting in collaboration with the Institution of Civil Engineers (ICE), applied both for approval of a scheme and for a subsidiary company of IStructE to become a scheme provider. As a result, the IStructE set up a company, Structural Engineers Registration Limited (SER), to provide the Scheme for Certification of Design (Building Structures).

The function of SER is to administer the Scheme, deal with any complaints and appeals, and report to the SBSA on membership of the Scheme and the certificates issued. A Scottish Registration Board, reporting to the Directors of SER and comprised of members of ICE and/or IStructE, assess the suitability of individuals and firms for membership and renewal of membership, and evaluate audit reports on the practice of certification by members.

Individual membership of the Scheme is open to a Chartered Civil or Structural Engineer who is a member or fellow of ICE and/or IStructE, who generally has at least five years’ post-chartered experience of the design and construction of building structures, and who can demonstrate knowledge and experience of the Scottish Building Standards system introduced by the Building (Scotland) Regulations 2004.

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